May 11th, 2011

Major Acquisition Issues

Naval Post Graduate School
8th Annual Acquisition Research Symposium

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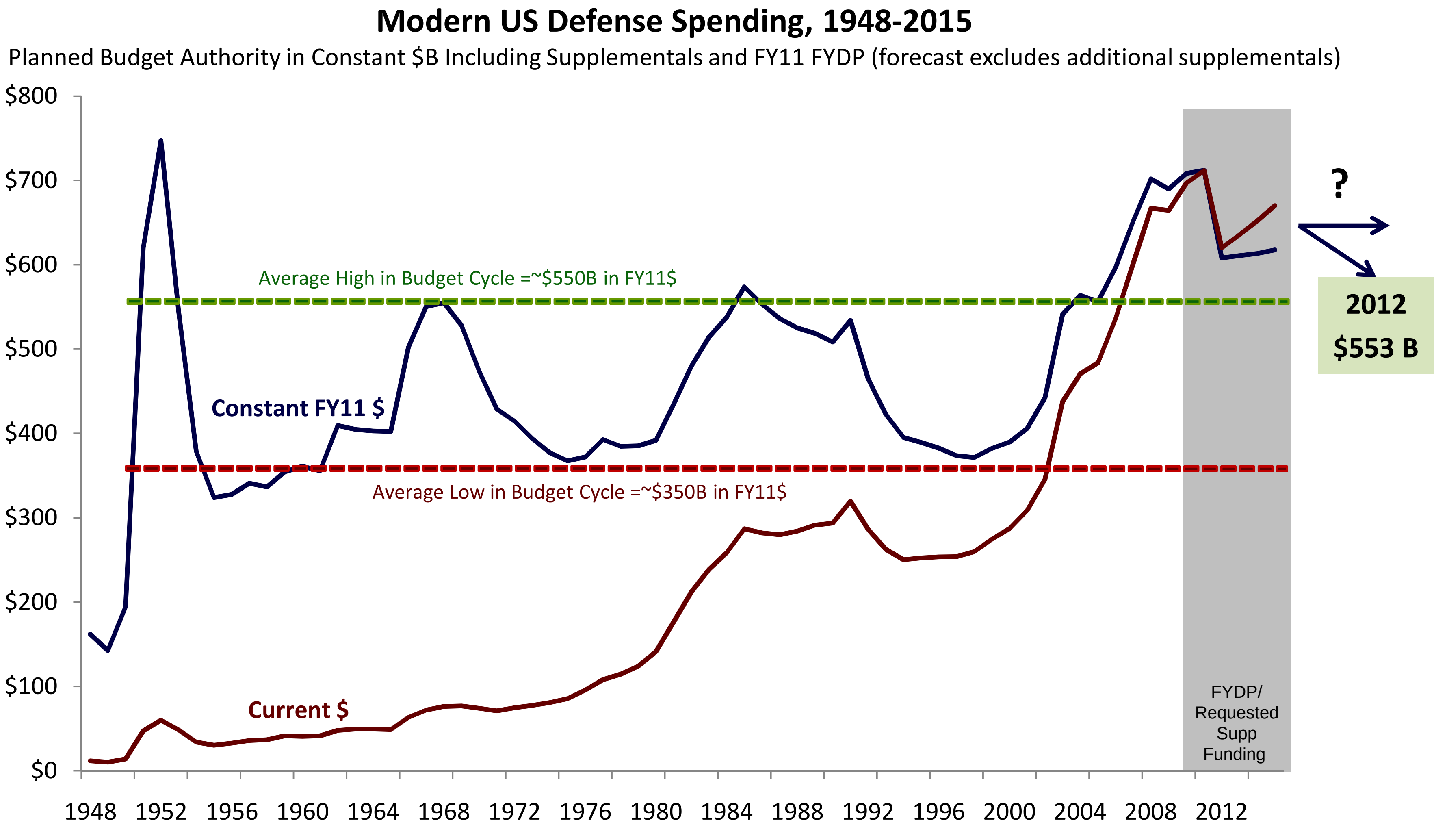
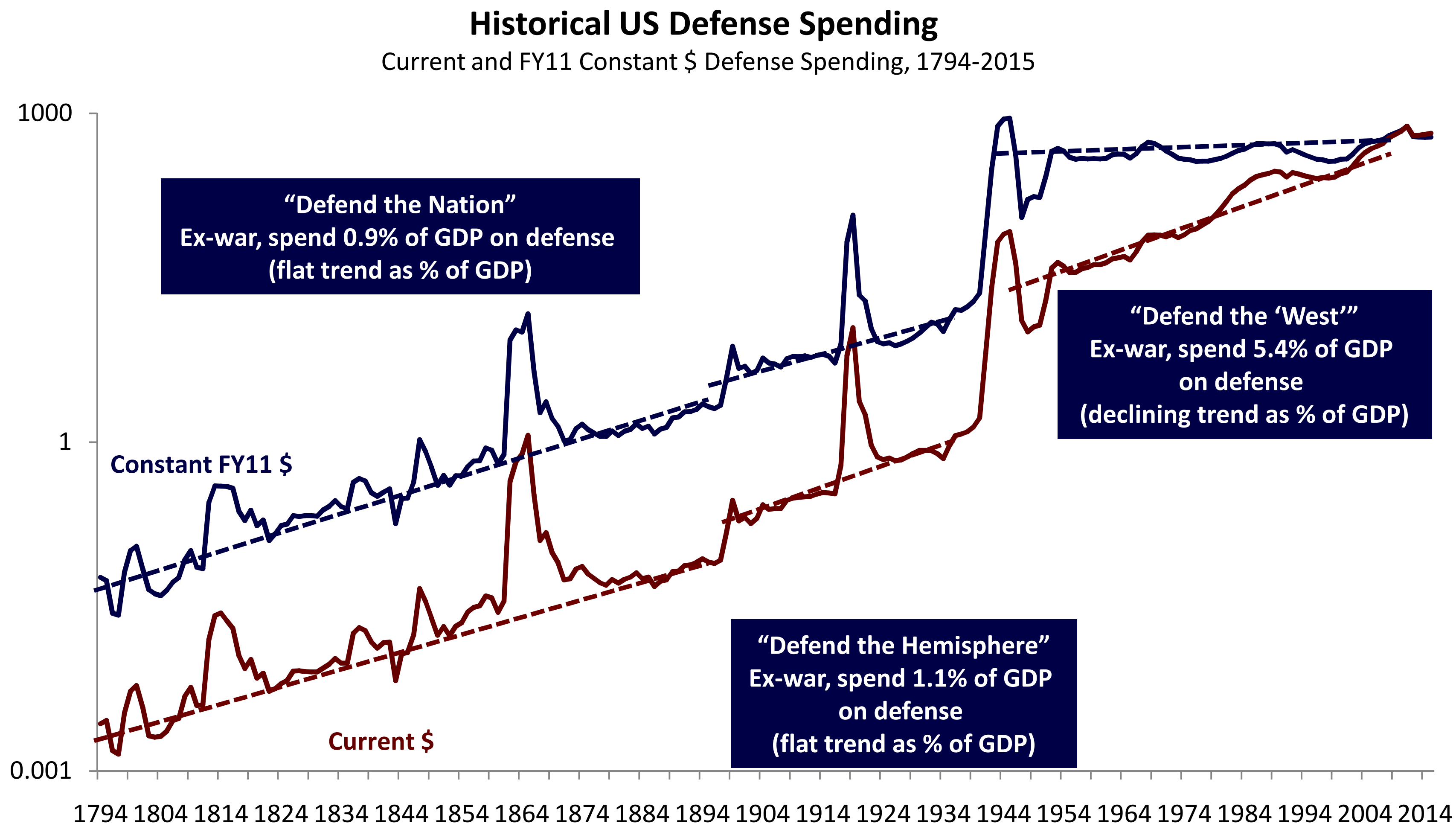
The Context - where is the US defense budget headed?

Post-WWII, we have stayed within a $350B-$550B "bounded range"; current wars have us above the range and begs the question…are we in a new band?



Source: US Department of Defense, RSAdvisors analysis

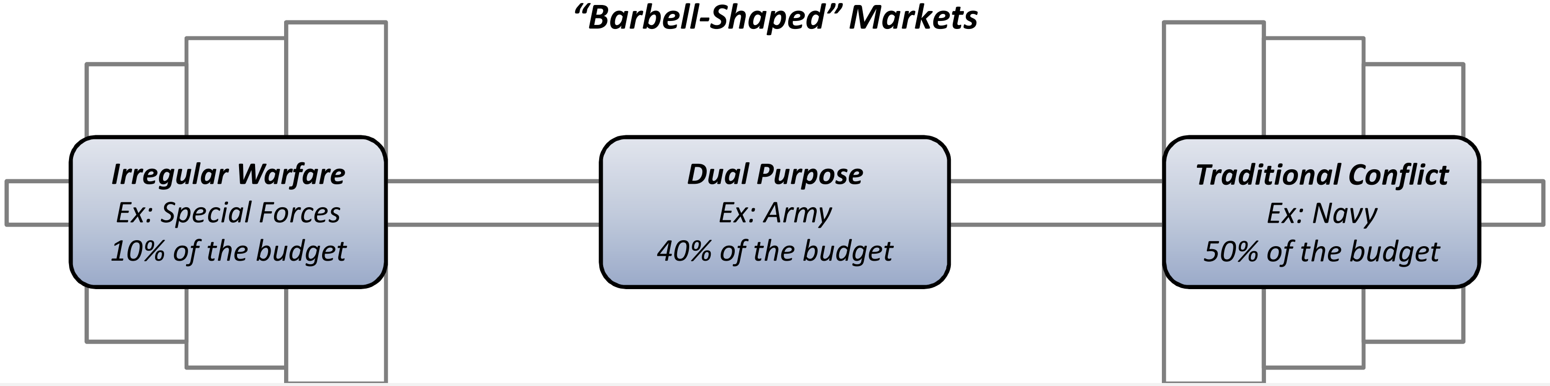
US defense spending has oscillated within three spending bands over US history



Source: US Department of Commerce, US Department of Defense, RSAdvisors analysis

And with US DoD facing a wide spectrum of threats, Pentagon continues to balance competing needs

"Barbell-Shaped" Markets



Slice #1	**The Long War** *Rapid acquisition, off-the-shelf/short development, quick response is key, COCOM centric*	**Deterrence** *Very long cycle, tech. development, platform-oriented but limited production, services centric*
Slice #2	**Reset/Retrofit** *Install "black boxes" in existing equipment to plug into network, insert available technology, maintenance, repair*	**Transformation** *Desire for large, horizontal integrating networks, leverage the IT revolution, requires large scale systems integrators*

2012 GATES ANNOUNCEMENTS

Cancel EFV
Buy more Reaper
Increase MC-12
Increase Marine repair/refurb
Fund current operations

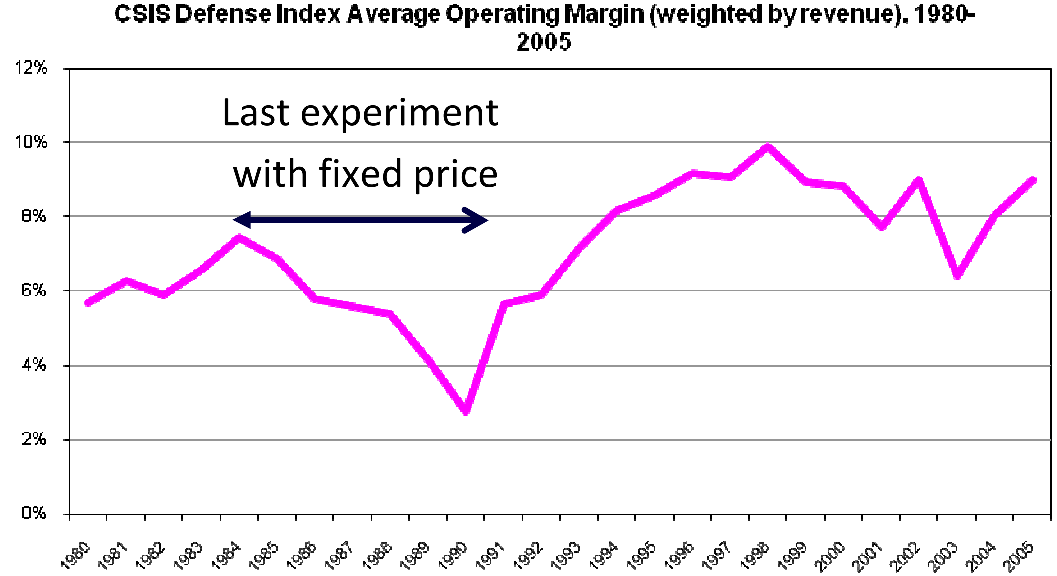
Accelerate Army tactical comms
Modernize Stryker

Buy more EELV
Develop Long Range Bomber
Modernize Abrams, Bradleys
Cut Army/Marines 47,000 in 2015
Navy EW improvements
Extra DDG-51, fleet oilers, etc.

Source: US Department of Defense, RSAdvisors analysis

The current environment has several key trends in operation

- **Evolving OCI policy…still being applied differently by various organizations**
- **Insourcing…appears to be slowing down, introduction of depot issue**
- **Export control reform …"once more unto the breach"**
- **Fixed Price Development…disastrous last time, resisting return**

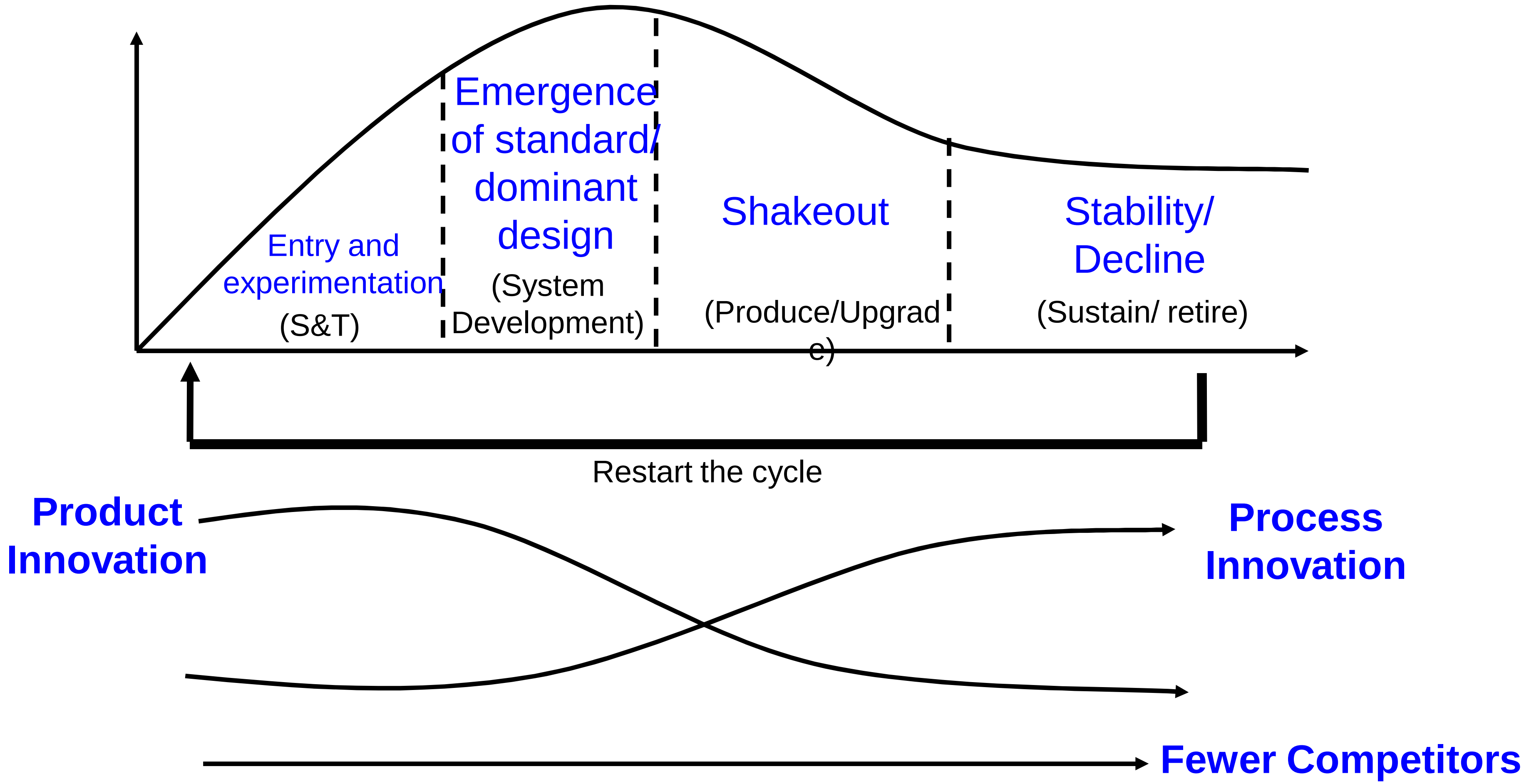


Sources: FactSet, Company Reports, CSIS Analysis.

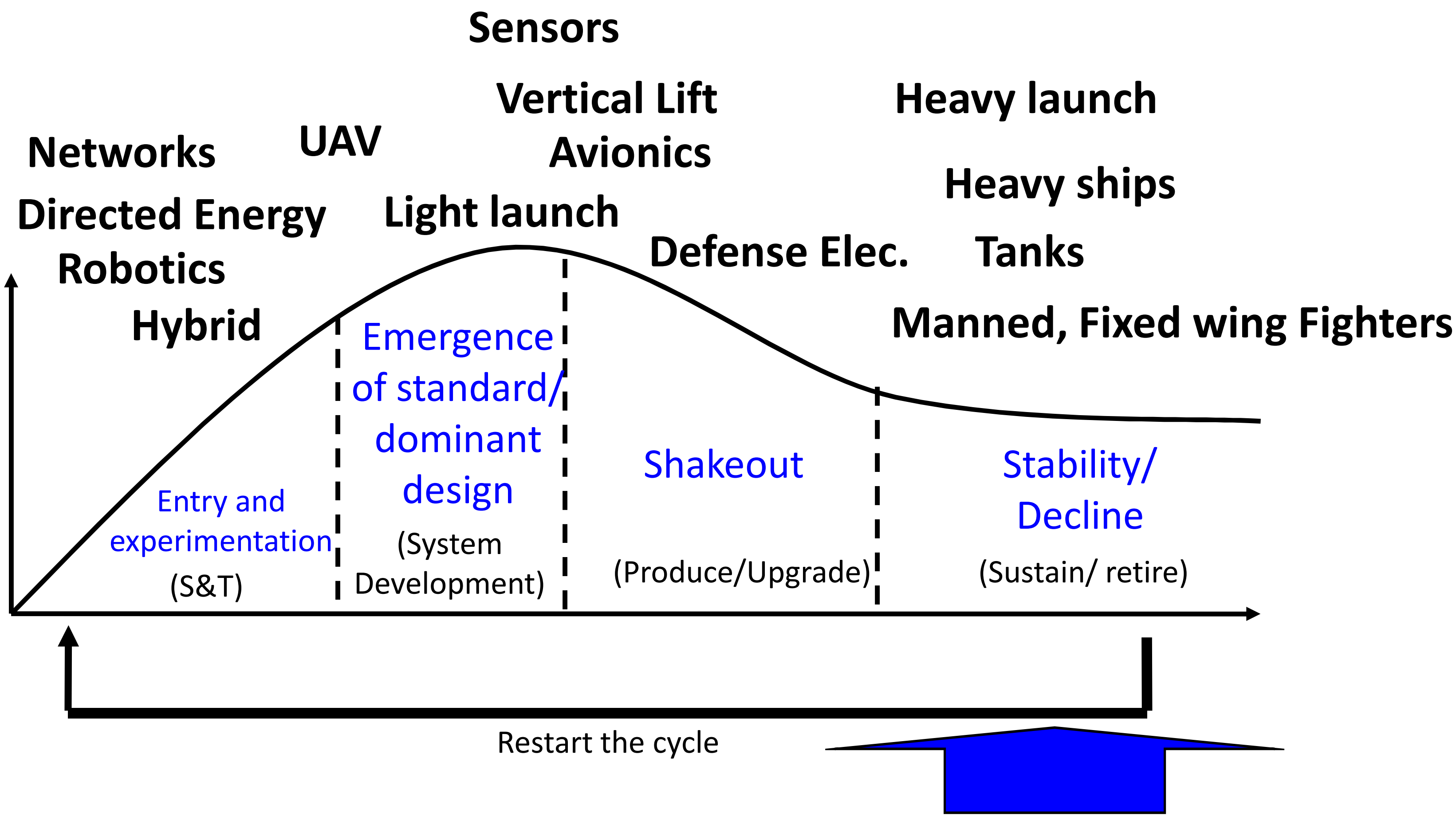
View #1: Defense-Industrial Policy Levers

Policy Aspect			Key Dimensions
Sourcing	**Global**	**National/Autarkic**	• Assuredness of supply • Jobs/"Buy America" • Get best technology to warfighter • Technology transfers
Innovation/Transformation	**Harvest/Pull: Civil/Mil**	**Create/Push**	• DoD R&D leadership • Source of transformational tech • Ability to control research agenda
Allowable sector structures	**Multi-Supplier**	**Monopoly**	• Sector importance/uniqueness • Foreseeable production demands • Public cost to keep add'l suppliers
Acquisition Philosophy	**Decentralized**	**Centralized**	• Service specific vs joint programs • Multiple vs fewer program starts • Prime/GFE mgmt vs LSI
Acquisition Strategy	**Competitive/Arms-Length**	**Negotiated/Partnership**	• Cost • Sensitive info dissemtn – Nat'l Sec • Urgency • Sector structure
Business proposition to industry	**Return**	**Stability**	• Robustness of defense industry • Attracting new entrants • Gov't stewardship of public funds

View #2: The Lifecycle of the Technology/Industry Sector…

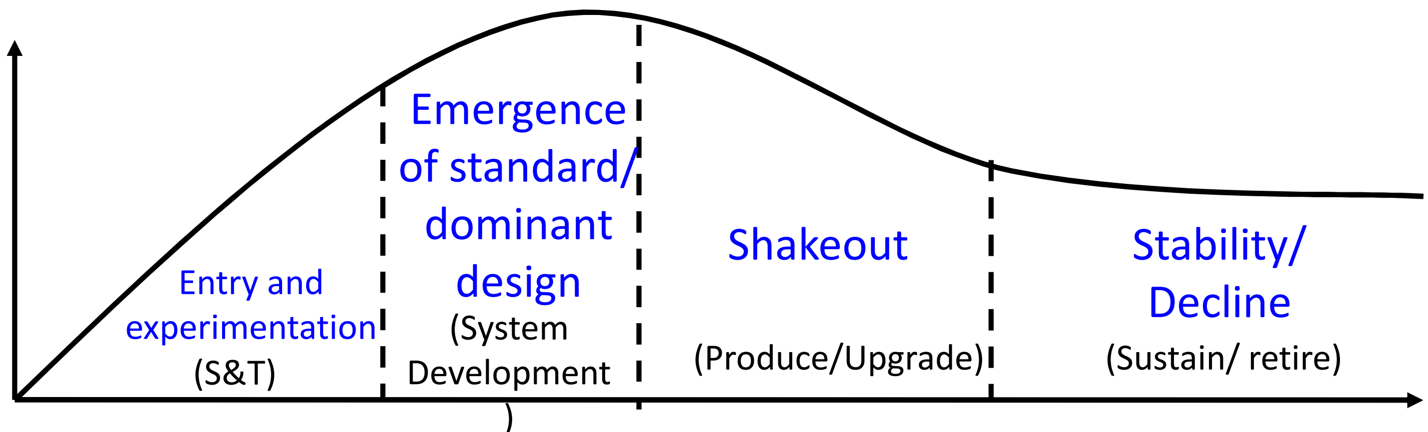


Where You Are in the Lifecycle…



Caveat – fight wars with the military you have

Drives Solutions/Incentive Structures…



Key Actors	Gov't, Academia FFRDC, industry (Skunk Works, UAV)	Industry (in production)	Industry, depot yard, arsenal

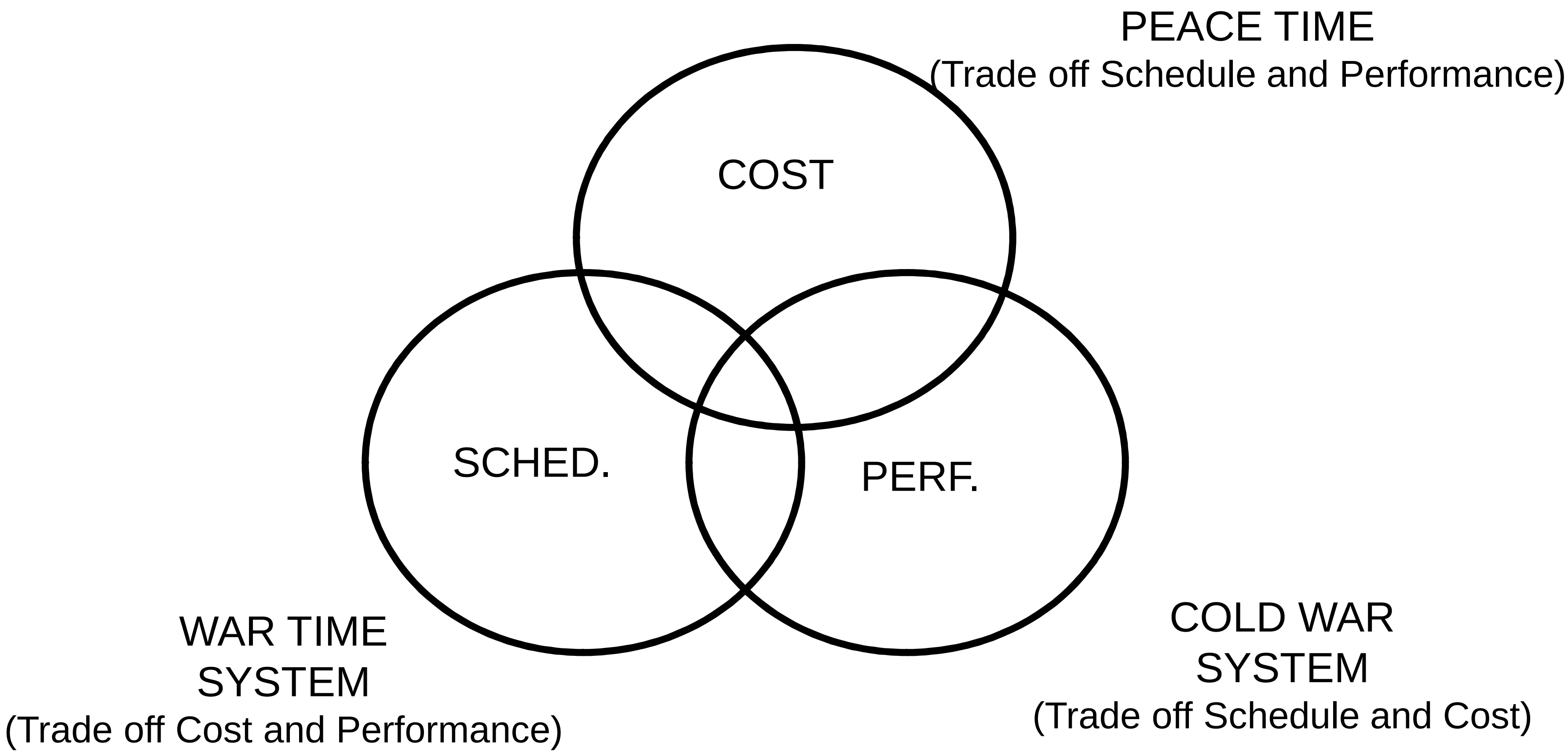
H.C. Scientists — engineers — manufacturing — support/logistics

Market Dynamic ← Competition → ← Negotiation/partnership →

Financial ← Growth → ← Margins → ← ROIC →

Investors ← Growth → ← GARP → ← Value →

View #3: What Mode Are you In…



Current Problem – We are in Two Modes! Do you need Two Acquisition Systems?

1. *What does the industry do with its cash?*

The major aerospace/defense firms have extremely low net debt levels

- About $5 billion of net debt according to company reports or about 2% of enterprise value

The industry now generating $20+ billion of free cash flow

Potential use of the cash

- Reinvest in the business
- Find adjacent growth/diversification
- Acquisitions
- Share repurchases
- Dividends

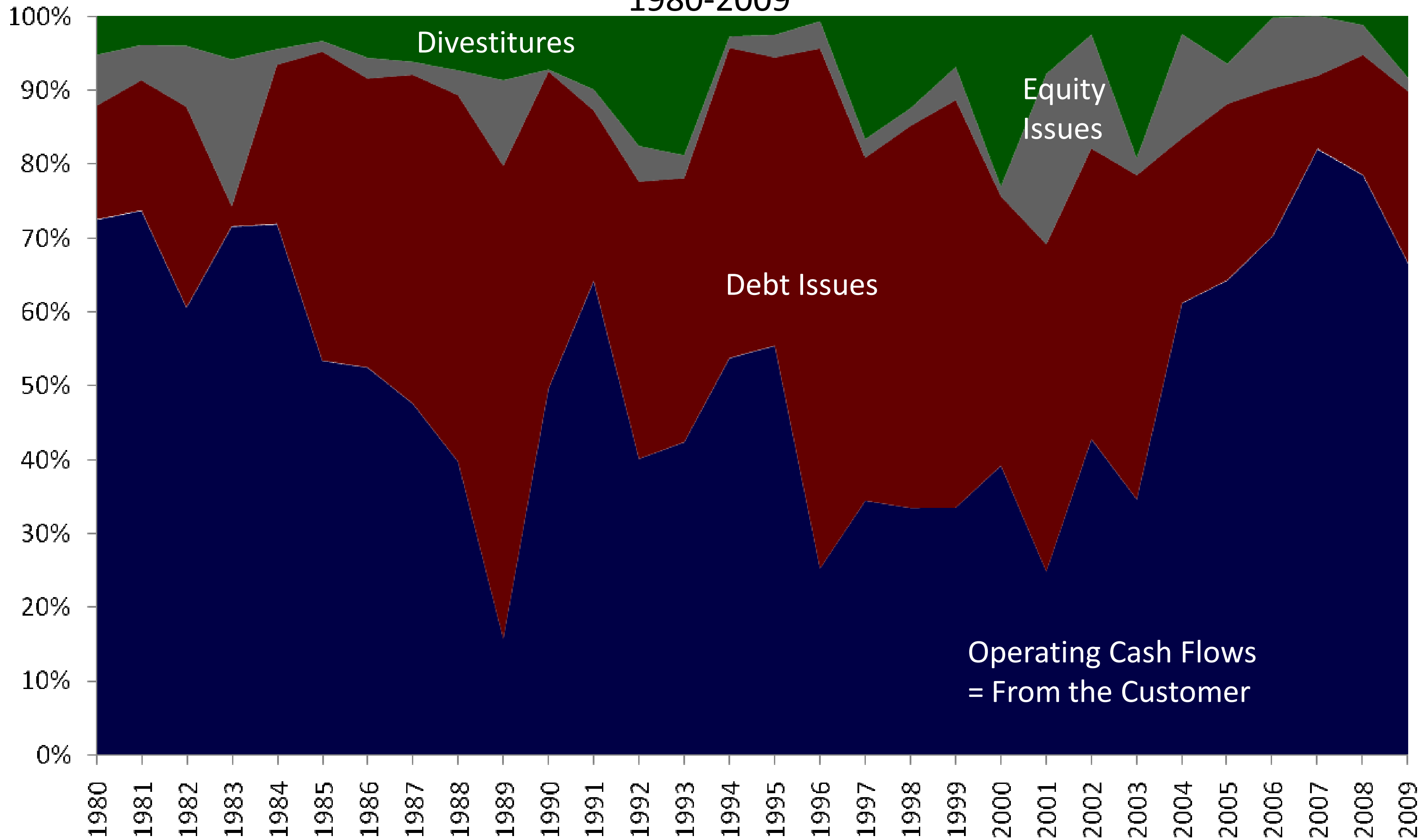
Sources: CAPIQ, Company released information, RSAdvisors analysis

1. *What does the industry do with its cash?*

- In the last 30 years, financial markets have provided 40-80% of the capital needed to operate…

Defense Industry Cash Inflows (Percent)

1980-2009

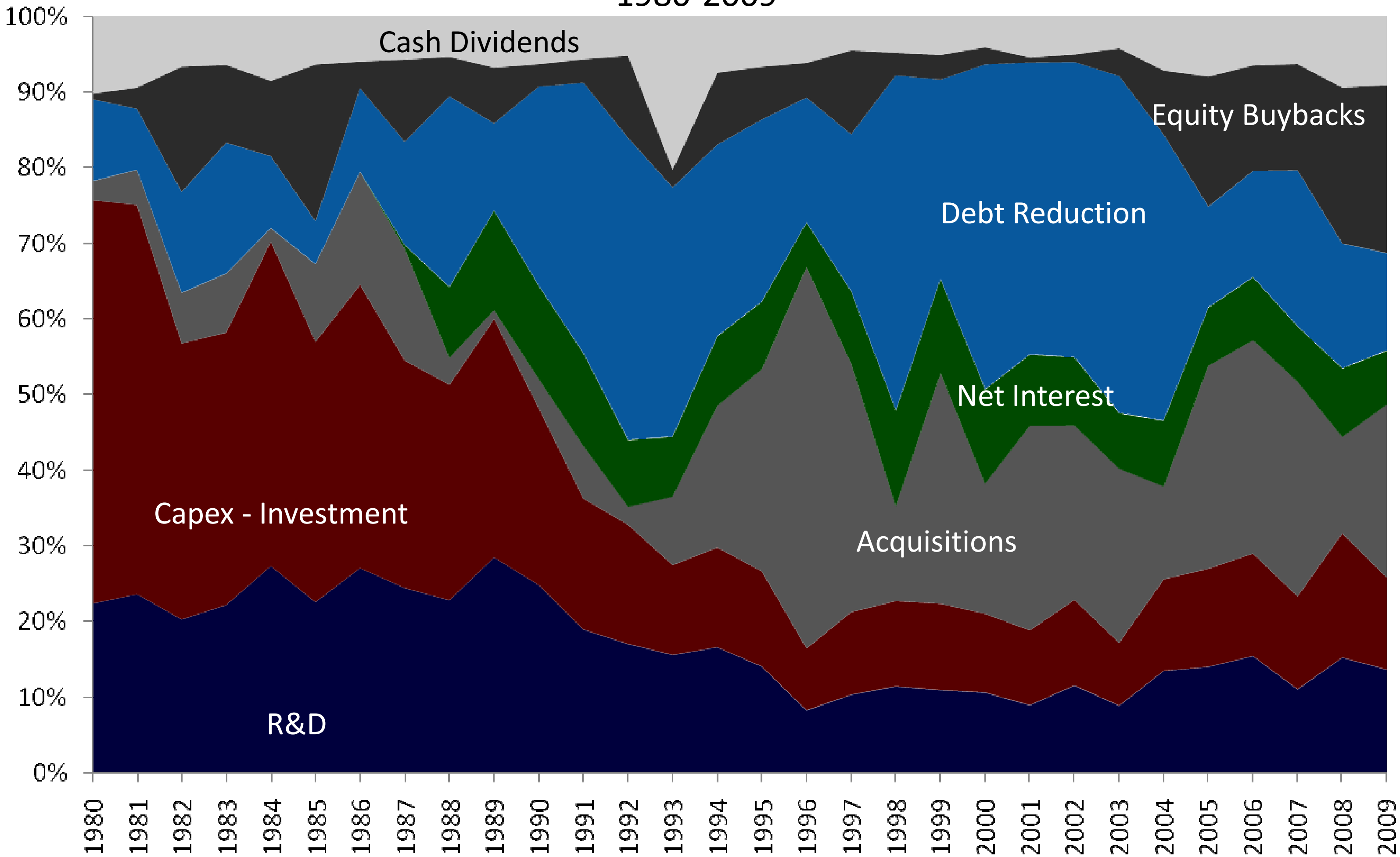


Sources: CapitalIQ, FactSet, company filings, RSAdvisors analysis

1. *What does the industry do with its cash?*

- In the absence of clear demand signals, M&A has substitute for IR&D

Defense Industry Cash Outflows (Percent)
1980-2009



Sources: CapitalIQ, FactSet, company filings, RSAdvisors analysis

2. What strategies were adopted during the last inflection point?

- The last cycle says that there are advantages to doing something and being first

Strategies Adopted by the Top 20 Defense Firms, 1991-1994

Strategy	Revenue Growth	Earnings Margin	P/E 1991	P/E 1994	EV/EBIT 1991	EV/EBIT 1994	Share Performance
M&A	26%	4.1%	7.5x	17.6x	5.3x	5.8x	153%
Commercial Diversification	1%	4.2%	9.4x	14.2x	4.5x	5.8x	55%
Ride the Wave	-8%	1.4%	13.9x	16.4x	5.1x	5.6x	88%

Strategies Adopted by the Top 20 Defense Firms, 1994-1999

Strategy	Revenue Growth	Earnings Margin	P/E 1994	P/E 1999	EV/EBIT 1994	EV/EBIT 1999	Share Performance
M&A	56%	4.5%	18.4x	18.2x	5.5x	7.7x	88%

Source: RSAdvisors analysis

Key M&A Trends for the Aerospace & Defense Industry

Trend	Reason	Evidence
Moving towards an area of strategic divestures	Big properties are becoming available	- Lockheed Martin divests PAE - Northrop Grumman spins its ship business - Argon ST was sold to Boeing
Divest business units with OCI issues	Respond to changing government policy	- Northrop Grumman divests TASC - Lockheed Martin divests EIG - ITT divests CAS
Supply chain restructuring	Program performance is slipping and costs are rising	Boeing acquires the Vought 787 factory and JV with Alenia to bring the project under tighter management and potentially reduce costs
Full life cycle support	The aftermarket represents a longer, more stable revenue stream	General Dynamics acquires Jet Aviation (general aviation maintenance, completions, engineering, fixed base operations, & aircraft management) for $2.3B
MOOTW – military operations other than war ("soft power")	Shift in focus due to Iraq/Afghanistan and new administration	L3 acquires International Resources Group, a support provider of energy, environment and natural resource management, relief and reconstruction, and economic development
Foreign investors seeking access to DoD and US commercial market	US budget still the only real game in town	Finmecannica acquires DRS (a supplier of integrated defense electronics products, services and support) for $5.1B
Financial sponsors are making some moves	Valuations getting attractive,	Financial sponsors executed 13% of transaction in 2008 over $50M, 11% in 2009, 16% in 2010, 17.6% in 1Q11 according to PWC

Sources: CAPIQ, Industry news, PWC, RSAdvisors analysis

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